#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION 5

#### Enforcement Confidential

DATE: **JAN 0 3 200**7

SUBJECT: Administrative Consent Order and Consent Agreement

and Final Order for Goldschmidt Chemical,

Mapleton, Illinois

FROM: Steven Rothblatt, Director

Air and Radiation Division

TO: Mary A. Gade, Regional Administrators/

original signed Bharat Mathur

By this memorandum, I am recommending issuance of an Administrative Consent Order (ACO) and Consent Agreement and Final Order (CAFO) to Goldschmidt Chemical Company for violations of the Illinois SIP and its Title V permit. Goldschmidt is a specialty chemical manufacturer.

U.S. EPA issued a Notice of Violation and Finding of Violation to Goldschmidt on June 29, 2005, for violating the Illinois SIP and its Title V permit. Specifically, Goldschmidt was emitting more than 8 lb/hr of organic material from its batch reactors without controlling its emissions as required by the SIP. Secondly, Goldschmidt was treating wastewater in tanks without proper air pollution controls.

Goldschmidt has been in compliance at its batch reactors since late 2005 when it eliminated all emissions there and will achieve compliance at the wastewater tanks by diverting high organic waste streams away from the tanks within one year of the effective date of the Order. Goldschmidt will spend \$600,000 on a SEP to close a sludge lagoon and pay a cash penalty of \$25,000. This action will reduce VOC emissions by approximately 117 TPY. The SEP will reduce VOC by another 5 TPY.

For these reasons, I recommend that you sign the attached ACO and CAFO.

Attachment

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION 5

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DATE: **DEC 2 0 2006** 

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and Final Order for Goldschmidt Chemical,

Mapleton, Illinois

FROM: George Czerniak, Chief

Air Enforcement and Compliance Assurance Branch

TO: Steven Rothblatt, Director

Air and Radiation Division

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Attachment		-, 1	1		
State Representative	Contacted:	4	MMI	193l	
Date:	1)/10/0			.   ]	
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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)	
Goldschmidt Chemical Corporation	)	Administrative Consent Order
Mapleton, Illinois	)	
-	)	EPA-5-07-113(a) IL-01
Proceeding Under	)	
Section 113(a)(1)(A) and (a)(3) of the	)	
Clean Air Act,	)	
42 U.S.C. § 7413(a)(1)(A) and (a)(3)	)	

## **Administrative Consent Order**

1. The Director of the Air and Radiation Division, United States Environmental Protection Agency (U.S. EPA), Region 5, is issuing this Order to Goldschmidt Chemical Corporation (Goldschmidt or Respondent) under Section 113(a)(1)(A) and (a)(3) of the Clean Air Act (the Act or CAA), 42 U.S.C. § 7413(a)(1)(A).

# U.S. EPA Determinations Regarding Statutory and Regulatory Background.

- 2. Each state must submit to the Administrator of U.S. EPA a plan for attaining and maintaining the National Ambient Air Quality Standards under Section 110 of the Act, 42 U.S.C. § 7410.
- 3. EPA promulgated final interim approval of the Illinois Title V program on March 7, 1995 (60 Fed. Reg. 12478), effective on March 7, 1995. The Illinois Title V program was granted final full approval by EPA on December 4, 2001 (66 Fed. Reg. 62946), effective November 30, 2001. Illinois' Title V operating permit program is currently codified in the Illinois Administrative Code at 35 IAC Part 270.

- 4. On March 7, 1996, Respondent applied for a Title V permit pursuant to the CAA Permit Program, application no. 96030145. On May 9, 2003, the Illinois Environmental Protection Agency (IEPA) issued Respondent a Title V CAA Permit for the Mapleton, Illinois Facility. This Permit expires on May 9, 2008.
- 5. Condition 7.1.3.c of Respondent's Permit states, in part, "Each process or operation identified in Condition 7.1.2 is subject to 35 IAC 215.301 or 215.302. Section 215.301 requires that VOM emissions not exceed 8 lb/hr if the VOM is a photochemically reactive material, pursuant to the definition in 35 IAC 211.4690 and there is no odor nuisance."
- 6. Condition 5.2.2.c of Respondent's Permit, citing 35 IAC 215.141(a), states, in part, that, "No person shall use any single or multiple compartment effluent water separator which received effluent water containing 757 l/day (200 gal/day) of organic material ... unless such effluent water separator is equipped with air pollution control equipment that is capable of reducing by 85% or more the uncontrolled organic material emitted to the atmosphere.

  Exception: If no odor nuisance exists the limitations of this subparagraph shall not apply if the vapor pressure of the organic material is below 17.24kPa (2.5 psia) at 249.3° K (70° F)."
- 7. Under Section 113(a)(1)(A) of the Act, 42 U.S.C. § 7413(a)(1)(A), the Administrator of U.S. EPA may issue an order requiring compliance to any person who has violated or is violating a SIP. The Administrator has delegated this authority to the Director of the Air and Radiation Division.

## **Findings**

8. Respondent was at all relevant times and is currently the owner and operator of the DeGussa Goldschmidt Chemical Plant at 8300 West Route 24, Mapleton, Peoria County, Illinois.

- 9. Respondent operates at least two Dissolved Air Flotation (DAF) tanks that meet the definition of effluent water separators. The DAF tanks receive organic material, including but not limited to, fatty amines and methyl chloride, in excess of 200 gallons per day. The tanks do not currently employ air emission control equipment.
- 10. The Permit defines Respondent's quaternary reactors nos. 1, 2, and 3 as emission units. These quaternary reactors meet the definition of emission sources and have the potential to release organic materials including, but not limited to, methyl chloride, to the atmosphere.
- 11. IEPA has documented complaints of nuisance odors from the Facility prior to May 9, 2003 generated by emissions or organic material, including amines and ammonia odors from the Facility. The wastewater Respondent processes contains amines and methyl chloride and Respondent processes amines, methyl chloride, and isopropyl alcohol in its quaternary reactors nos. 1, 2, and 3.
- 12. U.S. EPA has documented complaints of nuisance odors emanating from the Facility. A U.S. EPA representative visited the Facility on July 27, 2004 and detected odors at the wastewater treatment operations of the Facility. U.S. EPA has determined that an odor nuisance exists at the Facility caused by emissions from the quaternary reactors, the DAF tanks, and wastewater treatment operations.
- 13. On June 29, 2005, U.S. EPA issued a Notice of Violation/Finding of Violation to Respondent for violations of the Title V permit and the Illinois SIP.

## Violations Alleged by U.S. EPA

## Count I - 35 IAC 215.141

- 14. U.S. EPA has determined that the DAF tanks receive organic material at an average rate of 720 gallons per day based on information provided by Goldschmidt to U.S. EPA on October 12, 2004, in response to an Information Request issued under Section 114 of the CAA.
- 15. Respondent has violated 35 IAC 215.141 and condition 5.2.2.c of its Permit by failing to control organic material emissions from the DAF tanks by 85%.

### Count II - 35 IAC 215.301

- 16. U.S. EPA has determined that the organic material emissions from the quaternary reactors nos. 1, 2, and 3 are 14.9 lbs./hour, 21.8 lbs./hour and 20.4 lbs./hour, respectively, based on information provided to U.S. EPA by Goldschmidt on October 12, 2004, in response to an Information Request issued under Section 114 of the CAA.
- 17. U.S. EPA has determined that the organic material emissions from the quaternary reactors nos. 1, 2, and 3 during nitrogen sparging are 10.7 lbs./hour, 13.6lbs./hour and 54.5 lbs./hour, respectively, based on information provided to U.S. EPA by Goldschmidt on January 14, 2005, in response to an Information Request issued under Section 114 of the CAA.
- 18. Respondent has violated 35 IAC 215.301 and condition 7.1.3.c of its Permit by emitting more than 8 lbs./ hour of organic material from quaternary reactors 1, 2, and 3.

## **Compliance Program**

19. Without admission of liability, Goldschmidt agrees to comply with the terms and conditions set forth below.

- 20. Within no more than one year of the effective date of this Order, Respondent must achieve, demonstrate, and maintain compliance with 35 IAC 215.141 and condition 5.2.2.c of its Permit, as well as 35 IAC 215.301 and condition 7.1.3.c of its Permit at its Mapleton, Illinois facility.
- 21. Respondent shall divert high organic, odor causing wastewater from the wastewater discharged to the DAF tanks. The diverted wastewater stream(s) shall be:
- (a) recycled back in to the production process and recovered as a product or used as raw material to make product, or
- (b) sent directly from the process equipment to the Greater Peoria Sanitary District for treatment via enclosed pipe. A general description of the diversion project can be found in Attachment A of this Order "Proposed Waste Water Treatment Operation." As a result of this project, the amount of organic material discharged to the DAFs will be reduced to less than 200 gallons per day.
- 22. Respondent has eliminated the nitrogen sparge for the quaternary reactors nos. 1, 2 and 3 and agrees to permanently eliminate the nitrogen sparge for the quaternary reactors nos. 1, 2 and 3. As a result, organic material emissions from quaternary reactors nos. 1, 2, and 3 will not be greater than 8 lbs./hr each from each reactor. These steps are intended to eliminate volatile organic material emissions to the environment from the three quaternary reactors.
- 23. Respondent shall certify in its annual IEPA CAAPP Permit compliance certification due in May 2007, that it is complying with all of the conditions found in sections 5.2.2.c and 7.1.3.c of its Permit and in 35 IAC 215.141 and 35 IAC 315.301.

## General Provisions

- 24. This Order does not affect Respondent's responsibility to comply with other local, state, and federal laws and regulations.
- 25. Except as set forth herein, this Order does not restrict U.S. EPA's authority to enforce the Illinois SIP or any section of the Act including, but not limited to, Section 113 of the Act, 42 U.S.C. § 7413, Section 165(a) of the Act, 42 U.S.C. § 7475(a), 40 C.F.R. § 52.21, and Section 503(c) and 504(a) of the Act, 42 U.S.C. §§ 7661b(c) and 7661c(a).
- 26. Failure to comply with this Order may subject Respondent to penalties of up to \$32,500 per day for each violation under Section 113 of the Act, 42 U.S.C. § 7413, and 69 Fed. Reg. 7121 (Feb. 13, 2004) (amending 40 C.F.R. Part 19).
- 27. The terms of this Order are binding on Respondent, its assignees and successors. Respondent must give notice of this Order to any successors in interest, prior to transferring ownership, and must simultaneously verify to U.S. EPA that Respondent has given the notice.
- 28. This Order is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 et seq., because it seeks collection of information by an agency from specific individuals or entities as part of an administrative action or investigation.
- 29. All notices and submissions that Respondent is required to submit to U.S. EPA by this Order shall be certified by a responsible corporate official, and accompanied by the following certification:

I certify that the information contained in or accompanying this submission is true, accurate and complete. This certification is based on my personal preparation, review, or analysis of the submission, and/or supervision of persons who, acting on my direct instructions, made the verification that the submitted information is true, accurate and complete.

Respondent must submit all notices and submissions required by this Order to:

Attention: Compliance Tracker (AE-17J)
Air Enforcement and Compliance Assurance Branch
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

- 30. U.S. EPA may use any information submitted under this Order in an administrative, civil, or criminal action.
- 31. Respondent agrees to comply with the terms of this Order within no more than one year of the effective date of this Order.
- 32. This Order is effective on the date of signature by the Director of the Air and Radiation Division. This Order will terminate upon satisfaction of the requirements specified in the Compliance Program paragraphs 19, 20 and 21; provided, however, that the resolution described in paragraph 19, 20 and 21 shall survive termination of this Order.

12118106

Date

Reinhold Brand, President

Goldschmidt Chemical Corporation

12/29/2006

Stephen Rothblatt, Director Air and Radiation Division

## **Wastewater Treatment Operations Calculations**

Current Total Loading to POTW (Lbs./ Min.)

= 660(BOD ppm) x 430 (GPM) x 8.34 (Lbs./ Gal.)

= 2.38 (Lbs./Min.)

660 ppm BOD -- established based upon empirical data -- PDC Lab Results

Estimated Total Organic Loading to POTW (Lbs./ Min.)

= 2.38 (Lbs./Min.) x 0.65 (TOC/ BOD)

= 1.55 (Lbs./ Min.)

0.65 TOC/BOD - established based upon empirical data

Estiamted Organic Loading from DP & FAP to DAF/ WW Loop (20% Reduction in WW Cooling Loop))

 $= 1.55 \times (1/(1 - 0.2)) = 1.55/0.8$ 

= 1.95 (Lbs./ Min.)

20% biodegradation - established based upon empircal data

Total Organic Loading to DAF/ WW Loop without Isolation

= 1.95 (Lbs./ Min.) x 7.48 (gals./ (Cu. Ft.) / 65 (Lbs./ Cu. Ft.)

= 0.224 (Gals./ Min.)

= 323 (Gals / Day)

Total Organic Loading from FAP & DP Isolated Streams

= 1.16 Lbs./ Min

1.16 Lbs/min -- established based upon empirical data

= 1.16 (Lbs./ Min.) x 7.48 (gals./ (Cu. Ft.) / 65 (Lbs./ Cu. Ft.)

= 0.134 (Gals./ Min)

= 193 (Gals./ Day)

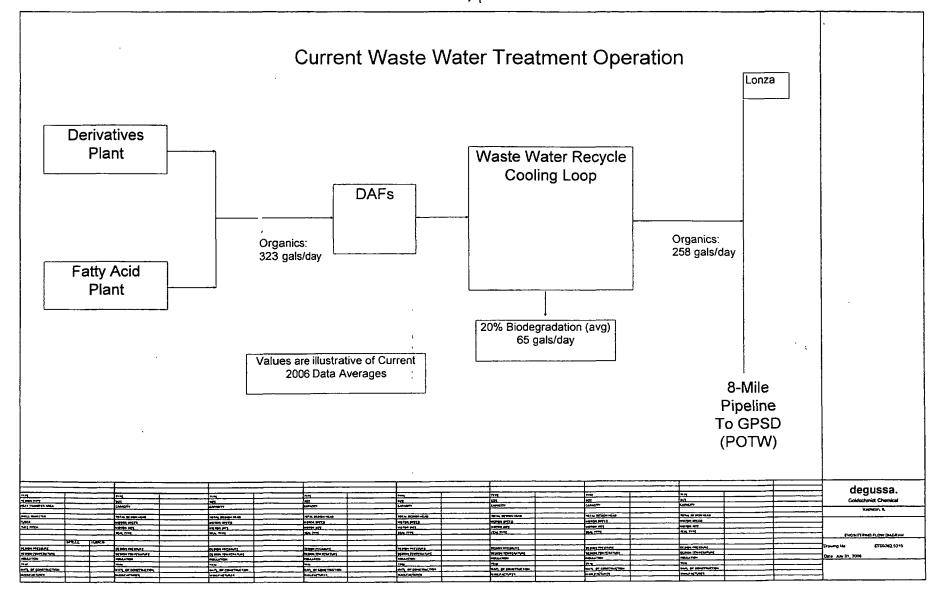
Total Organic Loading to DAF/ WW Loop with Isolation

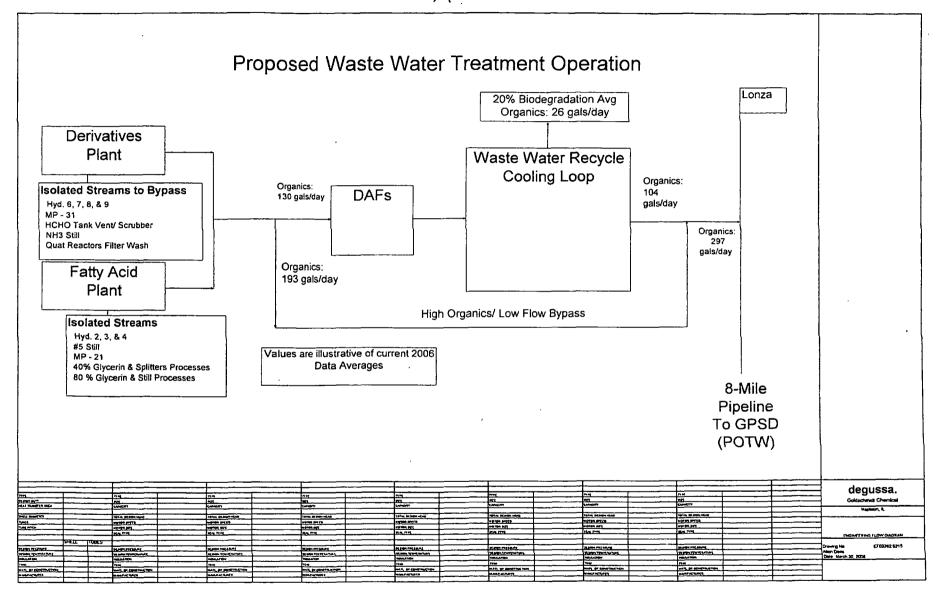
= 0.79 (Lbs. / Min.)

= 0.09 (Gals./ Min)

= 130 (Gals./ Day)

WW Density = 65 (Lbs./ Cu. Ft.)





#### CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I send Administrative

Consent Order (ACO) EPA-5-07-113(a)-IL-01, by Certified Mail,

Return Receipt Requested, to:

Mr. Reinhold Brand
Degussa Chemical Corporation
c/o Eric Boyd, Esq.
Seyfarth Shaw LP
131 S. Dearborn St, Suite 2400
Chicago, IL 60603

I also certify that I sent copies of the ACO to:

Wayne O. Kahila, P.E. District Engineer, Bureau of Air Illinois Environmental Protection Agency 5415 N. University Peoria, Illinois 61614

and

Julie Armitage, Section Manager Compliance and Systems Management Section Illinois Environmental Protection Agency P.O. Box 19506 Springfield, Illinois 62794-9506

on the 8th day of January, 2006.

Loretta Shaffer, Secretary
AECAS, (MN/OH)